




SLC (University of Delhi) Shyam Lal College



NAAC A++

Faculty Profile

Title	Dr.	First Name	Ajay Shankar	Last Name	Bangwal	Photograph
Designation	Assistant Professor					
Department	Physics					
Address	BK1/154, BK1 Block, Shalimar Bag, Delhi					
Email	abangwal@shyamlal.du.ac.in					
Web-Page						
Educational Qualification						
Degree	Subject		University/ College/Institution			Year
B.Sc.	Physics, Chemistry, Mathematics		Hemvati Nandan Bahuguna Garhwal University, Srinagar Garhwal			2014
M.Sc.	Physics		Hemvati Nandan Bahuguna Garhwal University, Srinagar Garhwal			2016
Ph.D.	Physics		Indian Institute of Technology (BHU), Varanasi			2022
Experience						
	Name of the University/College/ Institute/Organisation		Designation & Status (Permanent/Ad-hoc)	From	To	Effect ive time period
Teaching	Shyam Lal College, University of Delhi		Permanent	August 2023	Till Date	
Research/ Corporate						
Consultancy						
Teaching-Learning Process (Academic Year 2022-23 Onwards)						
Are You using ICT (LMS, E-Resources)?	If yes, please give the details below:					
	Name			Total Numbers		
E-Resources						
Techniques and Platforms						

Career Advancement and Contribution to College Corporate Life (2022-23 Onwards)

	Name of the Committee/ Centre/ Society/ Cell Designation	Designation	From	To
Convenor/Member of Committees	Computer and I.T. Committee	Member	Dec. 2023	Till Date
	Time Table Committee	Member	Dec. 2023	Till Date
Any Other Administrative Responsibility (Bursar, Coordinator, Superintendent etc.)				

Areas of Interest/Specialisation

S.No	Areas of Interest/ Specialisation
1	Material Science
2	Fuel cells, Electrocatalysis

Subjects Taught

S.No	Subject	S.No.	Subject
1.	Mechanics		
2.	Solid-State Physics		
3.	Physics of Earth		
4.	Science and Society		

Publications: Citation Index in Scopus/Web of Science or Pub Med/ Indian Citation Index

Title of Paper	Name of the Author	Title of the Journal	Year of Publication	Citation Index	h-Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self-citations	Impact factor,
Porous and high conducting cathode material $\text{PrBaCo}_2\text{O}_{6-\delta}$: The bulk and surface studies for synthesis anomaly	Ajay S. Bangwal , Pardeep K. Jha, Pawan K. Dubey, Manish K. Singh, A. S. K. Sinha, Vasant Sathe, Priyanka A. Jha and Prabhakar Singh	Phys.Chem . Chem. Phys.	2019	5.9	272	Indian Institute of Technology (BHU), Varanasi	13	3.676
Compositional effect on Oxygen Reduction Reaction in Pr excess double perovskite $\text{Pr}_{1+x}\text{Ba}_{1-x}\text{Co}_2\text{O}_{6-\delta}$ cathode materials	Ajay S. Bangwal , Pardeep K. Jha, Manisha Chauhan, Shikha Singh, A S K Sinha, Priyanka A. Jha and Prabhakar Singh	Int. J. Hydrogen Energy	2020	12.1	248	Indian Institute of Technology (BHU), Varanasi	08	7.67
Catalytic behavior of $\text{Pr}_{1-x}\text{Ba}_{1+x}\text{Co}_2\text{O}_{6-\delta}$ in alkaline medium	Ajay S. Bangwal , Manisha Chauhan and Prabhakar Singh	Int. J. Hydrogen Energy	2022	12.1	248	Indian Institute of Technology (BHU), Varanasi	02	7.67
High –temperature conduction mechanism	Dinesh Kumar , Ajay S. Bangwal , Saurabh Singh,	Physica B	2020	4.8	124	Indian Institute of	05	2.88

of samarium ferrite substituted sodium niobate ceramics	Priyanka A. Jha and Prabhakar Singh					Technology (BHU), Varanasi		
Microstructural dependent oxygen reduction reaction in Ruddlesden Popper perovskite (SmSr)NiO _{4-δ}	Manisha Chauhan, Pardeep K. Jha, Ajav S. Bangwal , Priyanka A. Jha and Prabhakar Singh	Phys.Chem . Chem. Phys.	2020	5.9	272	Indian Institute of Technology (BHU), Varanasi	06	3.676
Electrochemical performance of A-site substituted SmSrNiO _{4-δ} for energy storage application	Manisha Chauhan, Ajav S. Bangwal , Prabhakar Singh	Int. J. Hydrogen Energy	2023	12.1	248	Indian Institute of Technology (BHU), Varanasi	01	7.139
Electrochemical behavior of nickel oxide nanoelectrocatalyst in diverse electrolytic environments and its application as an effective electrode for supercapacitors	Manisha Chauhan, Ajav S. Bangwal , Konstantin Borodianskiy, Kamana K Mishra, Prabhakar Singh	Electrochimica Acta	2023	12.3	263	Shyam Lal College, University of Delhi	00	6.64

Books and Chapters in Edited Volumes/Books published, and papers in National /International conference Proceeding per teacher during the Year

Title of Book/Paper/ Book Chapter	Publisher	National/International	Year
Synthesis and Characterization of Cathode material Pr _{0.6} Ba _{1.4} Co ₂ O _{6-δ} for IT-SOFC and its comparative study with PrBaCo ₂ O _{6-δ}	American Institute of Physics	International	2020
Temperature dependence oxygen reduction activity of NiO thin film	Elsevier	International	2023

Conference/ Seminar/ Symposium/ Workshop/ Presentation

Sr. No.	National/ International/state	Topic	Presentation/Attend ed /Resource Person	Date	Duration	Conferences
1	International	International Virtual conference MICTAS-2020	Presentation	05-06 th July 2020		
2	International	International e-Conference on Advanced Functional Materials and Optoelectronic Devices-ICAFMOD-2020	Presentation	13-15 th June 2020		
3	International	International Conference on Condensed Matter & Applied Physics-ICC 2019	Presentation	14-15 th October 2019		
4	International	International Conference on Functional Nanomaterials-ICFNM 2019	Presentation	22-25 th February 2019		
5	National	Indian Materials Conclave and 30th Annual General Meeting of MRSI-MRSI 2019	Presentation	12-15 th February 2019		
6	National	National conference on Advanced materials and nanotechnology-AMN-2018	Presentation	15-17 th March 2018		

7	International	International Conference on Advances in Biological Systems and Materials Science in Nano-World-ABSMSNW	Participation	19 th -23 rd February 2017		
1	National	NEP 2020: Model Curriculum in Physics	Participation	8 th -9 th February 2024		Workshops
2	International	Indo-Italian workshop on “solid oxide fuel cell: evolving trends of electrode materials	Resource Person	24-25 th March 2021		
3	National	Rietveld Refinement	Participation	22-24 th September 2020		
4	National	Experimental & Computational Tools for Materials Research-ECTMR 2020	Participation	01-08 th June 2020		
5	National	Gian Course on “Fuel Cell Power Generation and Battery Storage	Participation	16-20 th September 2019		
6	National	LaTeX for Beginners & LaTeX for thesis writing	Participation	06 th and 30 th 2018		
Research Projects/ Innovation Projects (Major Grants/Research Collaboration)						
Sl. No.	Title of the Project	Funding Agency	Status/Output			
Research Guidance (Ph. D./ M. Phil.)						
		No. of Ph.D. Students	No. of M.Phil. Students			
	Awarded					
	Submitted					
	Under Progress					
Fellowships/Awards /Distinctions/Recognitions						
Year of Award	Name of the Fellowship/Award/ Distinction/ Recognition Designation	Designation	Name of the Academic Bodies /Association	International/National/ State		
2011	Scholarship for Higher Education	B.Sc.	DST INSPIRE	National		
2016	Inspire Fellowship	Ph.D.	DST INSPIRE	National		
2020	Newton-Bhabha Ph.D. Placement Fellowship	Ph.D.	British Council and DST	International		
Incentive to the teachers who receive recognition/awards						
State	National		International			
Association with the Professional Bodies						
	Name of the Organisation		Year			
	Membership					
	Any Other					
Development of E-Learning Delivery Process/Material						
S.No.	Title of the Module			Recognized by/Submitted at/ Delivered at any government setup		

Refresher/ Orientation Programme/ FDP / Other Specialised Courses				
S.No.	Topic	Name of the Organiser	Place	Duration and Year
1	Advanced Research Methodology	T.L.C., Ramanujam College	Online	22 Sept.- 06 Oct. 2023
2	Orientation Programme for “Faculty in Universities/Colleges/Institutes of Higher Education	T.L.C., Ramanujam College	Online	21 Aug.- 19 Sept. 2023

Declaration

I do hereby solemnly declare that the information given and the statements made by me are correct and true to the best of my knowledge.



Dr. Ajay Shankar Bangwal

Signature with Full Name